## Sarah McGee

smcgee@snm-effects.com www.snm-effects.com

EXPERIENCE Zoic Studios, Los Angeles, CA, September 2009 to Present

Pipeline Manager, June 2016 to Present

Developed automated render queue management algorithm on Google Cloud to increase render capacity by 300% and reduce per node costs by 23%.

Designed and developed Houdini pipeline by leveraging reusable Python libraries from Maya and Nuke pipeline and building custom nodes for Houdini-specific features.

Trained and mentored junior developers.

Pipeline Tools Developer, September 2009 to June 2016

Developed photogrammetry tools for virtual sets featured in the VES-nominated "Once Upon a Time" pilot and Universal Studios Virtual Stage demo.

Developed and released previs iPad app, ZEUS:Scout, and camera tracking iOS app, ZEUS:Track, on Apple App Store.

Created previs tools for virtual stage sets on the iPad for "Once Upon a Time", "Once Upon a Time in Wonderland", "Intelligence", "Descendants", and "Pan Am".

EDUCATION Carnegie Mellon University, Pittsburgh, PA

Masters in Entertainment Technology, May 2010

Rice University, Houston, TX

B.S. in Electrical and Computer Engineering, Cum Laude, May 2008

TECHNICAL SKILLS

Languages: C/C++, Python, MEL, C#, VEX, JavaScript, Objective-C, Assembly, RSL

**3D Software**: Houdini, Maya

**2D Software**: Nuke, After Effects, DaVinci Resolve, Photoshop, Premiere, Hiero **API**: Houdini, Maya, Nuke, Hiero, CUDA, After Effects, Shotgun, Unity, OpenGL

OS: Windows, Unix, Mac

Management: Technical Management, Team Leadership, Staff Development

**PRESENTATIONS** 

**SXSW 2017**, "Can a Film Made by a Machine Move You?"

Presented automated music video editing algorithm based on a heuristic function for songs with a four-four meter signature that follow an AABA form.

SIGGRAPH Exhibition 2016, "Houdini Pipeline Integration and Arrow VFX

Breakdown"

Presented ease of porting Zoic's core Python tools from Maya and Nuke into Houdini.

LANGUAGE SKILLS Intermediate Japanese

ORGANIZATIONS Visual Effects Society (Awards Committee Member)

Chair of Ballot Software Sub-Committee